SUPERFUND FIVE-YEAR REVIEW SITE SURVEY				
Site Name: Arkwood, Inc. Superfund Site		<b>EPA ID No.:</b> ARD084930148		
Location: Omaha, Boone County, Arkansas		Date: November 30, 2015		
Contact Made By:				
Name: Stephen Tzhone	Title: Remedial Project Manager Organizatio		Organization: US EPA	
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Individual/Group Contacted:				
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Survey Questions				

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the fourth five-year review for the Arkwood, Inc. Superfund Site. The scope of the review is from August 2011 to present.

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1. What is your general impression of the work conducted at the site during this review period? (Work at an active site may include activities such as frequent sampling, construction/demolition, and operation of treatment systems while work at an inactive site may include infrequent sampling, maintenance of perimeter fence/barriers, or redevelopment of site for a new use.)

Answer: My general impression of the work conducted at the Arkwood site during the review period from August 2011 to present is as follows:

- A. All work performed by EPA Region 6's former RPM Shawn Ghose was exceedingly poor, shoddy, inept and suspect, as documented by me in detail and submitted in my complaints to R6 Management and to DAIGI Craig Ullmer of EPA's Office of Inspector General; please see public record.
- B. All work performed by EPA Region 6's former RPM Mark Moya was exceedingly poor, shoddy, inept and suspect, as documented by me in detail and submitted in my complaint to R6 Management and to DAIGI Craig Ullmer of EPA's Office of Inspector General; please see public record.
- C. All work performed by EPA Region 6's Community Involvement Coordinator Donn Walters was exceedingly poor, shoddy, inept and suspect, as documented by me in detail and submitted in my complaint to R6 Management and to DAIGI Craig Ullmer of EPA's Office of Inspector General; please see public record.
- D. All work performed by PRP McKesson's former Project Manager Jean Mescher was exceedingly poor, shoddy, inept and suspect, as documented by me in detail and submitted in my complaint to ADEQ's Director and Chief Counsel, to R6 Management and to DAIGI Craig Ullmer of EPA's Office of Inspector General; please see public record.
- E. All work performed by ADEQ's Geology Supervisor Dianna Kilburn was exceedingly poor, shoddy, inept and suspect, as documented by me in detail and submitted in my complaint to ADEQ's Director and Chief Counsel, to R6 Management and to DAIGI Craig Ullmer of EPA's Office of Inspector General; please see public record.
- F. All work performed by ADEQ's Branch Manager, Water Quality Planning Sarah Clem was exceedingly poor, shoddy, inept and suspect, as documented by me in detail and submitted in my complaint to ADEQ's Director and Chief Counsel, to R6 Management and to DAIGI Craig Ullmer of EPA's Office of Inspector General; please see public record.
- G. All work performed by EPA Region 6's current RPM for Arkwood Stephen Tzhone was exceedingly professional, credible, and complete.
- H. All work performed by EPA Region 6's Chief, AR/TX Section, Superfund Division Carlos Sanchez was exceedingly professional, credible, and complete.
- I. All work performed by EPA Region 6's Deputy Associate Director, Superfund Division John Meyer was exceedingly professional, credible, and complete.
- J. All work performed by EPA Region 6's Assistant Regional Counsel, Superfund Division Gloria Moran was professional and credible, although sometimes slow and incomplete.
- K. All work performed by ADEQ's Chief, Hazardous Waste Division Tammie J. Hynum was exceedingly professional, credible, and complete.
- L. All work performed by ADEQ's Project Coordinator Mark Moix was exceedingly professional, credible, and complete.
  - 2. From your perspective, what effects have site operations (*or inactive status*) had on the surrounding community?

Answer: EPA Superfund site operations have unreasonably, unjustly and unjustifiably prevented productive reuse of this important and desirable industrial site, costing the surrounding community immeasurably in lost economic opportunity, lost population and increased poverty and economic hardship, degrading the family and community cohesion beyond repair.

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Survey Ques	stions (Continued)		
3. During this review period, are you aware of any coand administration ( <i>If the site is inactive, please coequipment</i> )? If so, please provide details.			
and that the opportunity for economic renewal ar	and ADEQ do not care about their economic well-bein and jobs opportunity to secure the future of their familie tical risk to human health or the environment that ha		
	com local authorities? If so, please provide details.  employee to store for personal use a large, derelict with EPA and ADEQ acquiescence and without		
to be informed about the site activities – for example Answer: I do not feel well-informed by EPA or AD about the site have been actively obstructed by Dy	es and progress (If site is inactive, please consider luations.)? If not, please indicate how you would like ple, by e-mail, regular mail, fact sheets, meetings, etc. DEQ about site activities. My efforts to inform myself wayne Patrick of EPA Region 6 FOIA. I have been yed by filing FOIA requests, which involved delays of		
many months in my receiving current information.	. Donn Walters, Community Involvement Coordinator inform the local community, in dereliction of his duty		

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Survey Questions (Continued)			

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operation? (If site is inactive, please consider maintenance of fences or equipment and the site's appearance.)

Answer: Site management and remedial operations under former EPA RPM Shawn Ghose was shoddy, incompetent, deceptive, unscientific, reprehensible, detrimental, derelict, and a violation of the public trust, which did irreparable harm to the landowner and the local community.

Site management under the current EPA RPM Stephen Tzhone has been exemplary, scientific, credible, fair, thorough, incisive, exacting and professional. Mr. Tzhone's efforts to communicate with me and other members of the public have substantially compensated for EPA Community Involvement Coordinator Donn Walters abysmal failure to perform his duties or fulfill his responsibilities to the public with regard to the Arkwood site. Mr. Tzhone's efforts to bring Arkwood remedial operations, documentation and analysis into compliance have substantially compensated for former EPA RPM Shawn Ghose's abysmal failure to perform his duties or fulfill his responsibilities to the public with regard to the Arkwood site.

7. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe the purpose and results. (*This question is for public officials who have a responsibility to maintain public safety. Please note if this question does not apply to you.*)

Answer: Does not apply to me.

8. Have there been any complaints, violations, or other incidents related to the site that required a response by your office? If so, please summarize the events and results. (*This question is for public officials who have a responsibility to maintain public safety. Please note if this question does not apply to you.*)

Answer: Does not apply to me.

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## **Survey Questions (Continued)**

9. Have there been any changes in state or federal environmental standards which may call into question the protectiveness or effectiveness of the remedial action? (This question is for public officials with the responsibility of determining if public health and safety are at risk. Please note if this question does not apply to you.)

Answer: Does not apply to me.

10. Do you know of opportunities to optimize the operation, maintenance, or sampling efforts at the site? (This question is for people who are responsible for the site. Please note if this question does not apply to you.)

Answer: Does not apply to me.

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Please add any other comments in the space below.

## Answer:

1. Pentachlorophenol for use as a pesticide was re-registered by the EPA in 2008. Here is an excerpt from the EPA "Reregistration Eligibility Decision for Pentachlorophenol (List B Case 2505)" United States Environmental Protection Agency, - Prevention, Pesticides and Toxic Substances (7510P), approved by Frank T. Sanders, Director, Antimicrobials Division, on September 28, 2008 (EPA 739-R-08-008):

"Surface water runoff from pentachlorophenol treated utility poles may be a possible source for pentachlorophenol or its transformation products in drinking water or in foods. Estimated Environmental Concentrations (EECs) for surface water have been calculated by the Agency. Drinking water levels of concern (DWLOCs) for acute and chronic dietary risk from drinking water were calculated. DWLOCs calculated for surface water for pentachlorophenol were 10,465 ppb for adult males and females and 2,990 ppb for children ages 1-6." (emphasis added)

- 2. The Arkansas standard as derived via unknown methodology in 1998 by Masoud Arjmandi, staff engineer at Arkansas Department of Environmental Quality (then called the Arkansas Department of Pollution Control and Ecology), requires concentrations of pentachlorophenol in New Cricket Spring to be less than 9.3 ppb (see attached letter which was included in Mr. Ghose's draft 3rd Five-Year Review).
- 3. The yearly averages of pentachlorophenol concentrations in New Cricket Spring (according to data presented by Mr. Ghose in his draft 3rd Five-Year Review) range between a high of 670 ppb (1996, the first year of sampling, based upon two samples for the whole year) and a low of 13 ppb (2009).

The highest concentration of pentachlorophenol in New Cricket Spring ever recorded for any single sample was the extremely anomalous reading of 1190 ppb from October 22, 2007. This reading was 548% higher than the next-highest reading for all of 2007 (217 ppb, also anomalous within the dataset) and therefore of dubious reliability.

Even so, this highest-ever recorded concentration of pentachlorophenol in New Cricket Spring is less than one-eighth of the EPA drinking water level of concern for adults and less than one-half the drinking water level of concern for children ages 1-6 for acute and chronic dietary risk from drinking water as expressed in the 2008 EPA reregistration document cited above.

4. New Cricket Spring has never been a source of drinking water. Pentachlorophenol from the Arkwood site has never impacted any source of drinking water.